

REPORTING REGULATOR FOR MANAGING A GAS TRANSPORTATION SYSTEM

Abstract

A reporting regulator for use in a gas transportation system includes an electrical interconnection that couples a plurality of input ports to a processor and a memory. Sensor data is received at the input ports and the data is stored into the memory. The reporting regulator is assigned a unique identification number such as a MAC address. The reporting regulator marks the received sensor data with attributes such as an identification number, a time stamp or a date stamp. After marking the data, the data is transmitted to a database location. The marked data can be reassembled in time and space by a central computer using the attributes. A processor can utilize this data to monitor, characterize and control an entire gas transportation system. System events can be pinpointed in time and space using the marked data. Further, system characterization and performance metrics can be utilized to improve system efficiency, emergency management, scheduling of preventive maintenance, and billing methods.